

Name: _____

Calculus

Answers to Your Try Problems for Chapter 5

5a) $\Delta x = 1$, $\frac{1}{4} \cdot 1 + \frac{9}{4} \cdot 1 + \frac{25}{4} \cdot 1 + \frac{49}{4} \cdot 1 = 21$. Approximate area = 21. (Exact area = $\frac{64}{3}$.)

5b) Left sum = 0.88646, Right sum = 0.843228.

5c) Object will travel between 8m and 13m. Approximately 10.5m.

5d) $\frac{1}{5}x^5 - \frac{5}{2}x^2 + 3x + C$

5e 1&2) $F(x) = \ln x + \sin x + c$

5f 1&2) $F(x) = x^2 \ln x + c$

5g) Area = 0.895.

5h) Average value = $\frac{4}{3}$.

5j) $-\frac{4}{3}$